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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/774,300	02/06/2004	Soren M. Hansen	606-60-PA	5448
22145 7590 03/16/2007 KLEIN, O'NEILL & SINGH, LLP 43 CORPORATE PARK SUITE 204 IRVINE, CA 92606			EXAMINER PARSLEY, DAVID J	
			ART UNIT	PAPER NUMBER
			3643	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/16/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

# Office Action Summary

Application No.

10/774,300

Applicant(s)

HANSEN, SOREN M.

Examiner

David J. Parsley

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **Detailed Action**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2-13-07 has been entered.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 5-7 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S.

Patent No. 4,916,775 to Gallant in view of U.S. Patent No. 6,099,400 to Ragnarsson et al and in view of U.S. Patent No. 4,111,798 to Peterson et al.

Referring to claim 1, Gallant discloses a method of separating meat from the shells of shellfish, comprising the following steps, steam boiling the shellfish at a high pressure exceeding the atmospheric pressure for a specific period of time for keeping the meat of the shellfish in a

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compressed state due to the pressurization, while rapidly heating the shrimps to the elevated temperature for causing the meat of the shrimps to solidify and to loosen from the shells of the shellfish – see for example at 24 in figure 1 and column 2 lines 33-45, cooling the shellfish – see at 25 in figure 1, peeling the shrimps by mechanically opening the shells of the shellfish for allowing the meat loosely contained within the shells of the shellfish to fall out from the shells of the shellfish – see at 26 and column 2 lines 45-55, separating the meat of the shellfish from the shell parts and other parts of the shellfish, by flotational separation of the meat from the shell parts and other parts by introducing the meat with the shell parts and other parts attached thereto into a brine solution – at 29, including an amount of salt – at 30, for causing the meat to float on the brine solution while allowing the shell parts and other parts to sink – see at 29 in figure 1 and column 2 lines 61-68 and column 4 lines 42-68 and column 5 lines 1-45. Gallant does not disclose the device is used on shrimp having eggs attached. However, it is deemed that the device of Gallant is capable of operating on other shellfish such as shrimp with eggs since as seen in figure 1 the device of Gallant is capable of being used on shellfish of the size of shrimp and the eggs of the shrimp are capable of being removed from the meat of the shellfish and thus removed through the pipe at the bottom of item 29 with the shells. Gallant further does not disclose rapidly cooling the shellfish to a temperature at or below the atmospheric temperature for causing substantially all meat of the shellfish to be separated from the shells of the shellfish between an area behind the head of the individual shellfish and a part above the tail of the individual shellfish. Ragnarsson et al. does disclose rapidly cooling the shrimps to a temperature at or below the atmospheric temperature for causing substantially all meat of the shrimps to be separated from the shells of the shrimps between an area behind the head of the individual

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shrimp and a part above the tail of the individual shrimp – see at 2,11 and 12 and for example column 1 lines 34-67 and column 2 lines 1-67. Therefore it would have been obvious to one of ordinary skill in the art to take the process of Gallant and add the rapidly cooling step of Ragnarsson et al., so as to allow for the shellfish to be more easily and quickly removed from the shell during the peeling step. Gallant further discloses the amount of salt in the brine solution is controlled – via item 30. Gallant further does not disclose the brine solution has NaCl at 6-14% by weight. Peterson et al. does disclose a material separation device which can be used in the fishing/shellfish industry – see column 12 lines 51-55, using a brine solution using NaCl at 11% by weight – see column 15 lines 1-7. Therefore it would have been obvious to one of ordinary skill in the art to take the process of Gallant and add the brine solution having between 6 and 14% by weight NaCl of Peterson et al., so as to allow for the meat to be separated from the shells quickly and accurately during use.

Referring to claim 5, Gallant as modified by Ragnarsson et al. and Peterson et al. further discloses the temperature in the cooling step being in the range of 0-20°C – see for example column 2 lines 47-60 of Ragnarsson et al.

Referring to claim 6, Gallant as modified by Ragnarsson et al. and Peterson et al. further discloses the boiling being performed in a pressurized boiler in a continuous operation – see for example column 2 lines 21-47 of Ragnarsson et al.

Referring to claim 7, Gallant as modified by Ragnarsson et al. and Peterson et al. further discloses the boiling being performed in a pressurized boiler in an intermittent batch operation – see at 22-24 in figure 1 of Gallant where the intermittent batch is being produced by the hopper – at 22.

Referring to claim 10, Gallant as modified by Ragnarsson et al. and Peterson et al. further discloses forcedly introducing the peeled shrimps into the separation liquid along with the shell parts and any eggs – see for example – at 28 and 29 in figure 1 and column 4 lines 42-68 and column 5 lines 1-45 of Gallant.

Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gallant as modified by Ragnarsson et al. and Peterson et al. as applied to claim 1 above, and further in view of U.S. Patent No. 5,112,269 to Petersen et al.

Referring to claim 2, Gallant as modified by Ragnarsson et al. and Peterson et al. does not disclose the pressure being in the range of 4-20 bar. Petersen et al. does disclose the pressure being in the range of 4-20 bar – see for example column 2 lines 3-11. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Gallant as modified by Ragnarsson et al. and Peterson et al. and add the pressure being between 4-20 bar of Petersen et al., so as to effect quick separation of the shellfish meat from the shellfish shell.

Referring to claim 3, Gallant as modified by Ragnarsson et al. and Peterson et al. does not disclose the temperature being in the range of 150-250 °C. Petersen et al. does disclose the temperature being in the range of 150-250 °C – see for example column 2 lines 3-11. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Gallant as modified by Ragnarsson et al. and Peterson et al. and add the temperature being between 150-250 °C of Petersen et al., so as to effect quick separation of the shellfish meat from the shellfish shell.

Referring to claim 4, Gallant as modified by Ragnarsson et al. and Peterson et al. does not disclose the time being less than 20 seconds. Petersen et al. does disclose the specific period

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of time for the heating and pressurizing step being less than 20 seconds – see for example column 2 lines 4-11 and column 3 lines 47-65. Therefore it would have been obvious to one of ordinary skill in the art to take the process of Gallant as modified by Ragnarsson et al. and Peterson et al. and add the time being less than 20 seconds of Petersen et al., so as to allow for a larger amount of shellfish to be processed by the device of the process.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gallant as modified by Ragnarsson et al. and Peterson et al. as applied to claim 1 above, and further in view of U.S. Patent No. 3,818,818 to Hice. Gallant as modified by Ragnarsson et al. and Peterson et al. does not disclose the cooling is performed by a water-cooling bath. Hice does disclose the cooling is performed by a water-cooling bath – see for example – at 100 and 102 in figure 2 and column 4 lines 60-66. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Gallant as modified by Ragnarsson et al. and Peterson et al. and add the water bath cooling means of Hice, so as to allow for temperature of the objects in the bath to be quickly reduced to facilitate further processing of the objects.

### *Response to Arguments*

3. Regarding claims 1-8 and 10, the device of Gallant US 4916775 – at 29 is a brine separation device for use with shellfish in particular clams. Gallant does not disclose the device is used on shrimp having eggs attached. However, it is deemed that the device of Gallant is capable of operating on other shellfish such as shrimp with eggs since as seen in figure 1 the device of Gallant is capable of being used on shellfish of the size of shrimp and the eggs of the

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shrimp are capable of being removed from the meat of the shellfish and thus removed through the pipe at the bottom of item 29 with the shells. Further, Gallant discloses the peeling step – see at 26 and column 2 lines 45-55, where the shells are opened mechanically at 26. Further, the Petersen et al. reference US 4111798 is now used to disclose the use of NaCl salt in a material separation device being in the range of 6-14% by weight as seen in paragraph 2 above. The Petersen et al. reference is a separator used to separate heavy objects from light objects and therefore has similar function to that of Gallant and therefore the combination of the Gallant and Petersen et al. references is deemed proper given the motivation to combine stated above in paragraph 2 of this office action. Further, as seen in column 12 lines 50-55 of Petersen et al. the device of Petersen et al. has applications in the shrimp/fishing industry.

### *Conclusion*


4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David J. Parsley whose telephone number is (571) 272-6890. The examiner can normally be reached on Monday-Friday from 8am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Poon can be reached on (571) 272-6891. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



David Parsley  
Patent Examiner  
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